AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-37 (cancelled)

Claim 38 (new): A method of preparing a prepared cell, comprising encapsulating said cell in a cell encapsulation medium *in vitro* to form an encapsulation product for use in cell therapy *in vivo*, wherein said encapsulation product includes an integrin binding partner.

Claim 39 (new): The method as claimed in claim 38, wherein said integrin binding partner is selected from the group consisting of collagen, Fibronectin, Fibrinogen, laminin, thrombospondin, vitronectin, factor X, C3bi, Ig-like cell adhesion molecule (ICAM-1,2,3), type 1 collagen, vascular cell adhesion molecule (VCAM-1), mucosal addressin cell adhesion molecule-1 (MAdCAM-1), vitronectin, collagens, laminin, LFA, Mac-1, tenascin, von Willebrand factor, thrombospondin, factor X, FXIII, FXIIIa, Arg-Gly-Asp, Leu-Asp-Val, His-His-Leu-Gly-Gly-Ala-Lys-Gln-Ala-Gly-Asp-Val, an integrin binding partner containing the sequence Arg-Gly-Asp, Leu-Asp-Val, and an integrin binding partner containing the sequence His-His-Leu-Gly-Gly-Ala-Lys-Gln-Ala-Gly-Asp-Val.

Claim 40 (new): The method as claimed in claim 39, wherein said integrin binding partner is Fibrinogen.

Claim 41 (new): The method as claimed in claim 39, wherein said integrin binding partner is Fibronectin.

Claim 42 (new): The method as claimed in claim 41, wherein said encapsulation product is FXIII.

Claim 43 (new): The method as claimed in claim 39, wherein said encapsulation product is FXIIIa.

Claim 44 (new): The method as claimed in claim 39, wherein said integrin binding partner contains the recognition sequence argine-glycine-asparate (RGD).

Claim 45 (new): The method as claimed in claim 38, wherein said integrin binding partner is bound to said prepared cell.

Claim 46 (new): The method as claimed in claim 45, wherein said integrin binding partner is bound to said prepared cell prior to encapsulation.

Claim 47 (new): The method as claimed in claim 38, wherein said integrin binding partner is not bound to said prepared cell.

Claim 48 (new): The method as claimed in claim 38, wherein said integrin binding partner is in said cell encapsulation medium.

Claim 49 (new): The method as claimed in claim 38, wherein said integrin binding partner is at the surface of said cell encapsulation medium.

Claim 50 (new): The method as claimed in claim 38, wherein said cell encapsulation medium is selected from the group consisting of agarose with fibrin, agarose with Fibronectin, a combination of Fibronectin and Fibrinogen, plant-derived gums, alkali metal alginates and agarose, cellulose and its derivatives, gelatin, chitosan and extracellular matrix (ECM) components.

Claim 51 (new): The method as claimed in claim 38, wherein said cell encapsulation medium is a natural polymer compatible with the survival and function of said cell.

Claim 52 (new): The method as claimed in claim 38, wherein said cell encapsulation medium is a synthetic polymer compatible with the survival and function of said cell.

Claim 53 (new): The method as claimed in claim 38, wherein most of said encapsulation product comprises one prepared cell per encapsulation.

Claim 54 (new): A method of preparing a prepared cell for use *in vivo*, comprising encapsulating said cell in a cell encapsulation medium *in vitro* to form an encapsulation product, wherein said encapsulation product includes an integrin binding partner, and wherein said encapsulation product contains one cell.

Claim 55 (new): A method of preparing a prepared cell for storage or transportation for later use *in vivo*, comprising encapsulating said cell in a cell encapsulation medium *in vitro* to form an encapsulation product, wherein said encapsulation product includes an integrin binding partner.

Claim 56 (new): The method as claimed in claim 38, wherein said cell encapsulation medium contains a transgene.

Claim 57 (new): The method as claimed in claim 38, wherein said prepared cell contains a transgene.

Claim 58 (new): The method as claimed in claim 57, wherein said transgene is incorporated into the cell subsequent to including a transgene in said encapsulation medium.

Claim 59 (new): A method of providing cell therapy to a patient in need thereof, comprising administering the prepared cell of claim 38.

Claim 60 (new): The method as claimed in claim 59, wherein said administration is intercardiac.

Claim 61 (new): The method as claimed in claim 38, wherein said encapsulation product further comprises an external factor which can affect a host cell which is external to the encapsulation product.

Claim 62 (new): The method as claimed in claim 61, wherein said external factor is selected from the group consisting of DCAM, ICAM and VCAM.

Claim 63 (new): The method as claimed in claim 38, wherein said cell is selected from the group consisting of fibroblasts, endothelial cells, smooth muscle cells, progenitor/stem cells (e.g. from bone marrow, adipose, or peripheral blood), dermal fibroblasts, EPC (endothelial cells) or other mesenchymal cells, marrow stromal cells (MSC), and epithelial cells.

Claim 64 (new): The method as claimed in claim 59, wherein said cell is selected from the group consisting of fibroblasts, endothelial cells, smooth muscle cells, progenitor/stem cells (e.g. from bone marrow, adipose, or peripheral blood), dermal fibroblasts, EPC (endothelial cells) or other mesenchymal cells, marrow stromal cells (MSC), and epithelial cells.

Claim 65 (new): The method as claimed in claim 38, wherein said cell is selected from the group consisting of fibroblasts and bone marrow stromal cells.

Claim 66 (new): The method as claimed in claim 59, wherein said cell is selected from the group consisting of fibroblasts and bone marrow stromal cells.

Claim 67 (new): A kit for cell based therapy in a mammal, comprising an effective amount of an integrin binding partner and instructions for the use thereof to prepare a cell encapsulation medium.

Claim 68 (new): The kit as claimed in claim 67, wherein said instructions further describe administration of the cell based therapy to a patient in need thereof.

Claim 69 (new): The kit as claimed in claim 68, wherein said instructions describe administration by cell based gene therapy.

Claim 70 (new): The kit as claimed in claim 67, further comprising an encapsulation medium.

Claim 71 (new): The kit as claimed in claim 69, wherein said instructions describe administration using viable, transfected mammalian cells, said transfected mammalian cells containing at least one expressible trans-gene coding for an apoptosis inhibitor.

Claim 72 (new): The kit as claimed in claim 71, wherein said mammalian cells are selected from the group consisting of dermal fibroblasts, smooth muscle cells, progenitor cells, endothelial progenitor cells, epithelial progenitor cells, smooth muscle progenitor cells, stem cells, and endothelial cells.

Claim 73 (new): The kit as claimed in claim 67, wherein said integrin binding partner is selected from the group consisting of collagen, Fibronectin, Fibrinogen, laminin, thrombospondin, vitronectin, factor X, C3bi, lg-like cell adhesion molecule (ICAM-1,2,3), type 1 collagen, vascular cell adhesion molecule (VCAM-1), mucosal addressin cell

adhesion molecule-1 (MAdCAM-1), vitronectin, collagens, laminin, LFA, Mac-1, tenascin, von Willebrand factor, thrombospondin, factor X, FXlll, FXllla, Arg-Gly-Asp, Leu-Asp-Val, His-His-Leu-Gly-Gly-Ala-Lys-Gln-Ala-Gly-Asp-Val, an integrin binding partner containing the sequence Arg-Gly-Asp, Leu-Asp-Val, and an integrin binding partner containing the sequence His-His-Leu-Gly-Gly-Ala-Lys-Gln-Ala-Gly-Asp-Val.

Claim 74 (new): The kit according to claim 67, wherein said cell encapsulation medium is selected from the group consisting of agarose with fibrin, agrarose with Fibronectin, a combination of Fibronectin and Fibrinogen, plant-derived gums, alkali metal alginates and agarose, cellulose and its derivatives, gelatin, chitosan and extracellular matrix (ECM) components.